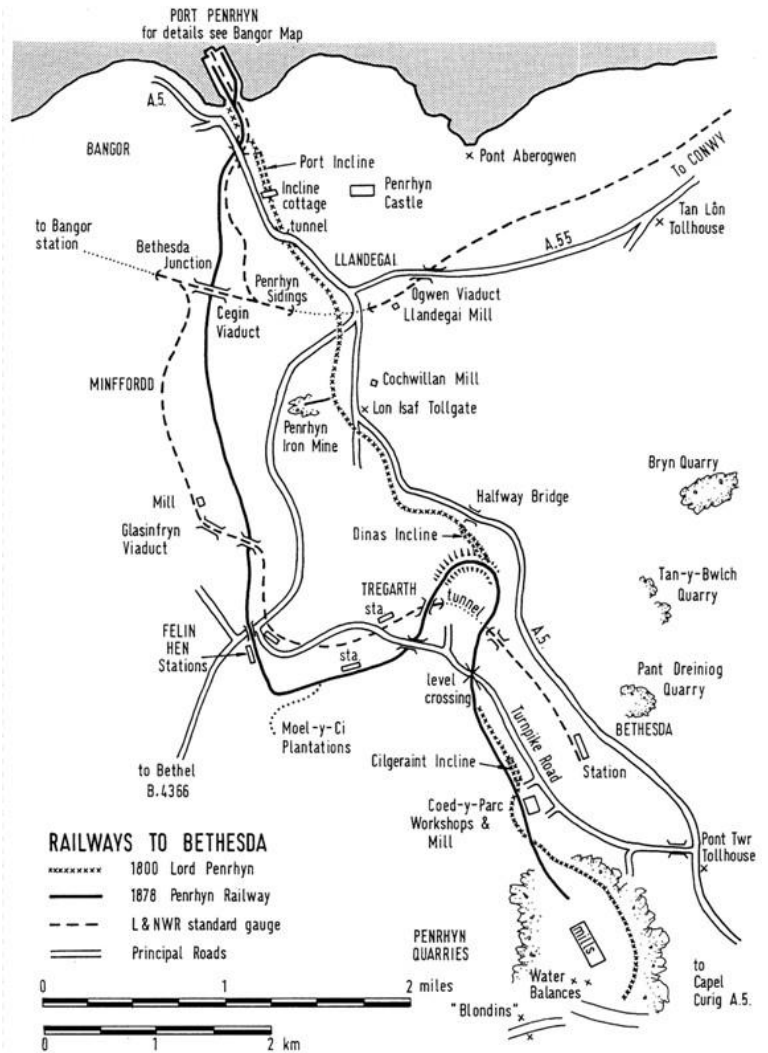
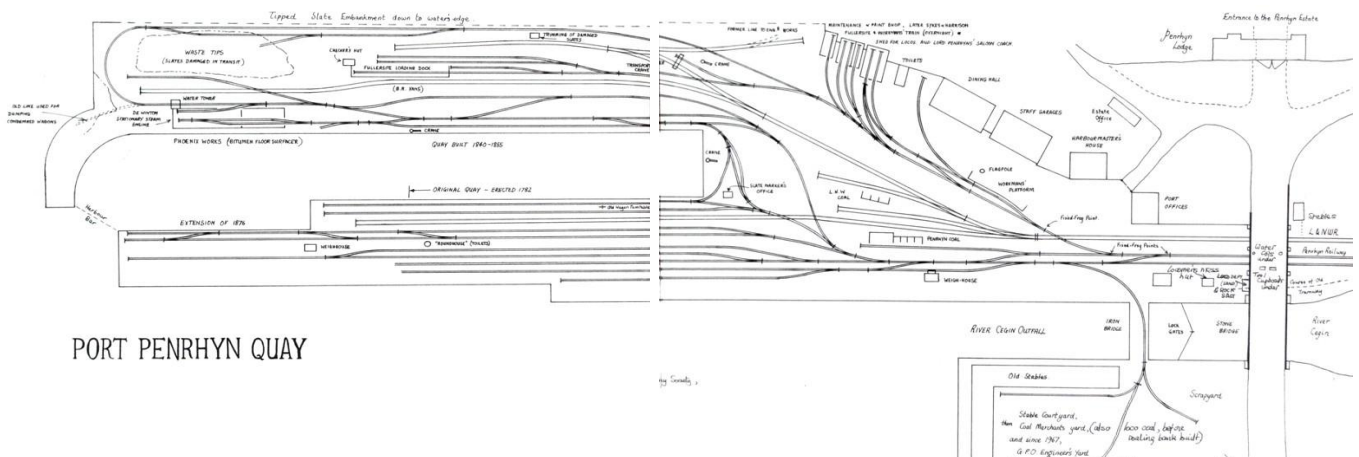


10) Port Penrhyn and the 1800 horse tramway

Slates from what became the workings of Penrhyn Quarries have been shipped from Abercegin near Bangor since about 1700. Originally boats were loaded on the beach at low tide, but the great increase in demand that marked the onset of the Industrial Revolution resulted in the development from 1780 of the present extensive facilities on the site that became known as Port Penrhyn. The Penrhyn Railway, running down to here from the Quarries near Bethesda, was first built as a horse tramway in 1800-1 then replaced by a 1 ft 10¾ in gauge locomotive-worked line on a different route circa 1878. The latter remained in use until June 1962, since when lorries have conveyed a very much-reduced traffic for shipment at the Port. The quays were also served by a standard gauge siding from the Chester & Holyhead line, opened in 1852 and removed in 1963, which allowed transshipment onto the main railway network. Our plan shows all these routes, also the L&NWR branch line from Bethesda Junction, Bangor to Bethesda.....



Our composite plan of the quays was compiled in October 1966, at which time the standard-gauge tracks had been removed, but their course was still evident. The narrow-gauge lines were still intact, but were removed just a few weeks later. The functions of the various buildings were explained to us by Iorwerth Jones, a former locomotive driver on the Penrhyn Railway.....





Although Port Penryn today is occasionally visited by a coasting vessel from mainland Europe (as seen in our picture right) to take on a cargo of slate brought down from the quarry by road, the quays are now the province of the local fishing fleet, the Straits' sand-dredger and civil engineering and building contractors.

The latter have restored and now occupy the Harbour Offices (below), built by Benjamin Wyatt in the late Georgian period. These are a relic of the Port's heyday when up to one hundred vessels were regularly at anchor, and arrivals, loading and departures had to be closely controlled.



Nearby and also being renovated are the canteen buildings and Harbourmaster's house (right), and the former locomotive and carriage sheds (below).



In front of these once ran a maze of railway lines, the standard gauge tracks sunken into the ground and crossed by the quarry lines on unusual swivel-rail sections.

The foundry behind the engine shed was privately run and still operates on a very much-reduced scale producing cast manhole covers; since 1971 the site has been largely occupied by scrap metal dealers. The older

buildings were originally part of a slate dressing works and a bank of limekilns is also still to be found, representing a further activity of the port complex. At the far end of the eastern quay, the fish-packing factory occupies premises that formerly had a very different role as a bitumen works; from here special wagons were employed to convey hot tar for use in the quarry and elsewhere along the route of the railway.

On the western jetty is a circular slate “loo” possibly contemporary with that part of the quay built in the early nineteenth century and reputed to have been the first flush toilet in Bangor (with assistance from the tide). It recently achieved some fame on becoming a listed building of architectural or historical interest, as the largest such communal structure in Wales (with seating for twelve)! It may not have been originally designed as such, since it displays the distinctive style of a quayside lock-up once used to detain drunken seamen and other offenders (there is another similar example at Barmouth).



The earliest of the quays, as depicted on old prints, was that on the Bangor side of the Afon Cegin outfall: its original red-brick warehouses and stables survive and have been partially rebuilt in recent years for new uses. On the walls of one, now used by the Bangor Sea Scouts, is a board giving the regulations for shipping and lists of tolls, signed by Arthur Wyatt, and thus dated at circa 1880, though the style of sign-writing suggests a much earlier origin. The old quay and its buildings have long since been relegated to subsidiary duties as a coal yard, and latterly for G.P.O. vehicle garaging. Tramway access was provided via a cast-iron bridge over the river, the girders of which are still in situ beneath the modern concrete span.



Upstream of this point the river opens up into a large basin used for sheltering vessels awaiting their turn at the quays; the flow of the river into the sea was regulated by wooden lock gates (right and below), whose condition is now barely sufficient to hold back the weight of water, below the bridges.



Where the railways and river converge onto the port they are crossed by a series of bridges carrying the approach road to Penrhyn Park's Port Lodge and the Wyatt family home, Lime Grove (below left), now an old people's home. Before the diversion of Telford's road through the Maesgeirchen Valley, this was the main road route into Bangor from the east; its continuation may be seen at the top of the hill out of the port, straight across the present A5 (below right).....



The archway in the picture once carried the approach drive to the Penrhyn Arms Hotel, which from 1884 was in use as the first home of the University College in Bangor. Unfortunately this large commercial hostelry, first established in 1799, was demolished in 1926 to make way for the rock cutting on the A5 bypass to the seaward side of the town, but its entrance portal survives in splendid isolation (right).....



Below are some prints of the hotel buildings at various stages of its existence.....



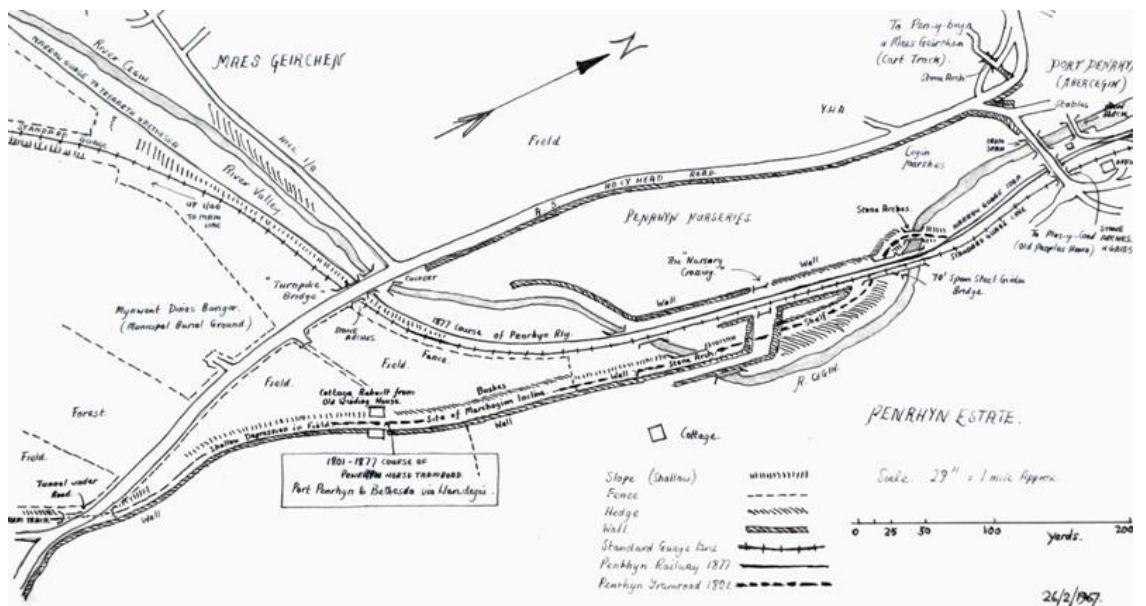


In the other direction from the port, the old road ran past Lime Grove and the nursery to rejoin the present route on the far side of the valley.



The port's river bridge bears a plaque "GHDP – 1820" (George Hay Dawkins Pennant was the 1st Baron Penrhyn) and it replaced a cast iron span of circa 1812 (possibly the tramway one mentioned above) at a higher level to give horses an easier climb up the hill. The new concrete bridge and road giving direct access to the port date only from 1967; before this all road traffic crossed the stone bridge and passed to the rear of the port offices.

Following the course of the railway lines under the road bridges and away from the Port, the standard gauge siding is to the left, with the double track Penrhyn Railway of 1878 on the right, very close but at a slightly higher level. The narrow gauge lines converged to a single track and both routes then cross the Afon Cegin on a plate-girder span. Our sketch plan shows this area, described in more detail following...



Below and to the right (593724) is the stone three-arch bridge of the 1800 horse tramway route, intact but heavily overgrown, which then curves sharply to pass beneath the newer bridge at its far end.....



A short distance further on the Cegin is crossed once more, and bridges on both routes survive here also. The stone arch of the tramway one, now to the left, was probably shared by the old main coast road route.....



Beyond the second river crossing, the three former railway routes diverge: Penrhyn Railway and the L&NWR siding curve westwards and pass beneath the A5 road approximately on the site of the new accommodation bridge before parting company themselves (these newer lines are described more fully in the next section). The tramway continues south in a cutting, then straight up Marchogion Hill by means of the "Port Incline". The summit winding house survives converted to domestic use as "Incline Cottage" (photo below left) and the rebuilt centre section through which the wagons passed is still conspicuous. The tramway route now runs hard by the estate wall and the tunnel by which it passed beneath the main road survived at 593715 (photo below right) until October 1975, when the original stone slab roof beams were replaced by pre-stressed concrete and the alignment filled in.



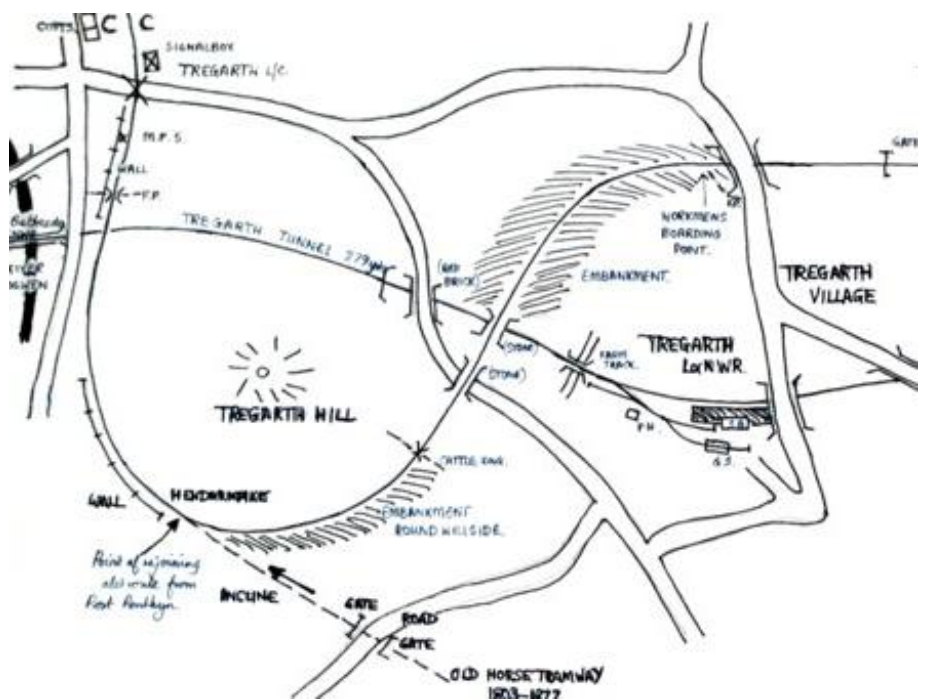
In the field to the right on the far side of the road may be seen part of a circular brick wall foundation thought to be the remains of a very old lead smelting works. The railway course may be picked up again above the junction of the A5 and Bethel roads at Llandegai, where the smithy was recently demolished during road-widening works (598707). The line followed the lane in front of the workmen's cottages before heading into open country on a shallow embankment parallel to and one field away from the A5.....



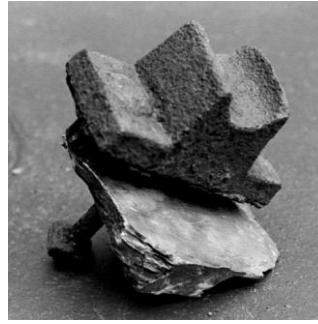
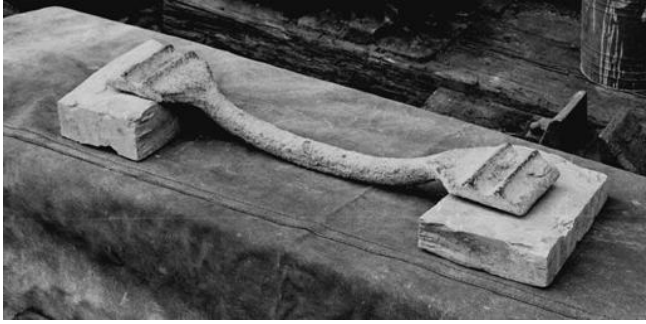
To the west, the deep cutting leading to a rabbit warren of surface and underground workings (598695) marks the site of the Penrhyn Iron Mine (1913-22) which used a temporary cable incline and part of the 1800 tramway route for access to the road at Llandegai.

The tramway's course across a field at the end of the embankment section has been completely obliterated, but it may be rejoined to pass behind the cottages adjacent to Lon Isaf tollgate on the A5. Hereabouts the old turnpike road diverges from Telford's route, which is now joined by the tramway as far as Halfway Bridge. Just beyond is the foot of the second inclined plane, which may be traced for part of its length along the right bank of the river and steepening before becoming obliterated by the waterworks.

The arch under the old road at Dinas (609685), two thirds of the way up the incline, is partially visible on one side, and the trace continues upward to meet the 1878 route of the Penrhyn Railway running on a slate slab embankment high up on the hillside. From here both routes to the quarry were close together, and will be described further in the next section. It is interesting to note, however, the changing manner in which the three railways to Bethesda tackled the obstruction of Tregarth Hill: the tramway, as we have seen, going directly up the side on an inclined plane; the 1878 line following the contour on a sharp curve, having gradually gained height; and the 1884 standard gauge branch tunneling directly beneath and emerging straight onto a high stone arch over the river (610679). All three routes are easily traceable and provide an interesting comparison of construction techniques. Our sketch map shows their relative disposition in this area....



The Penrhyn Quarry tramroad is famous for its use originally of oval-section rail, in the belief that this would reduce friction, but the concave wheel treads very quickly wore down to fit tightly on the rail. Several interesting items of the original track have been found along the route over the years, along with a wheel which is thought to have started life on a wagon, but was later utilized as a pulley in the quarry. All these items are now exhibited at the Penrhyn Castle museum.....



Keith A. Jagers November 1978

Updates – November 2011

Port Penrhyn quay nowadays sees a variety of mixed commercial and leisure uses, and has fortunately avoided the residential over-development seen at other local marinas such as Deganwy, Port Dinorwic and Portmadoc. The approach-road bridge is a listed structure, and the Port Office, Harbourmaster's house, canteen, locomotive sheds and round loo are all maintained in good order, together with a weigh-house and two old hand-cranes. The foundry and bitumen works have both gone, neither being a great loss to the environment, but the scrapyard remains in business.

On the north-west side of the river the former stables building and yard remain in commercial and community use, but the old toll-board is now displayed in the museum at Penrhyn Castle. The old lock-gates have gone, replaced by a simple sluice and weir; the old cast-iron bridge beams below the concrete approach-road structure are no longer in situ, but one of them is still to be found lying on the quayside nearby. The house at Lime Grove is also in commercial use. Here are some recent pictures of the quay area.....





The old main road section, with its former Penrhyn Arms approach road bridge and **entrance portico**, are unchanged; the latter is now a listed structure.



One little-known but interesting item we failed to record on our 1970s visits was **Lord Penrhyn's Bath House**, in a remote location approx 1 mile east of Port Penrhyn, and accessible therefrom with due care around low tide, by walking along the beach. It has deteriorated considerably over the years, and it has to be said, now looks more attractive from a distance than close-up. As can be seen, the remains are in a very advanced state of decay, and should be approached with extreme caution. One of our party commented of the right-hand scene below "...so this is what surveyors would describe as *Heave!*"....

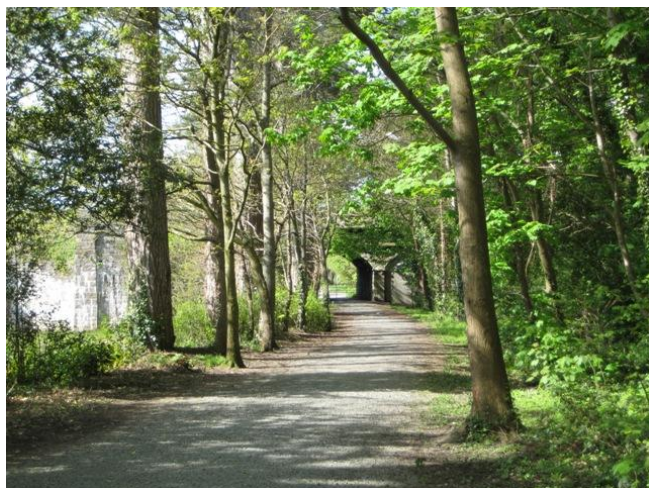


The ruins can also be easily seen on a clear day from the end of Beaumaris Pier, and photographed from there with a good quality long lens. This is how we first discovered they still existed, but the day of our visit was decidedly not a clear one!

On the beach near the access point at the port, as well as numerous discarded variously shaped and weathered fingers of slate from the school slate factory, may still be found solid masses of tipped molten slag from the iron foundry.....



The route of the former Penrhyn Quarry Railway (the later, locomotive-worked line) out of the port area is now an attractive pedestrian and cycling route (below left). The old stone tramroad bridge survives in much the same condition as it was forty and more years ago.....



Marchogion Incline winding-house cottage is a listed building in private residential use. The mysterious circular foundation structure in the field on the west side of the old A5 road has long gone, the site now being occupied by the Bangor Crematorium premises.

At Bryn, the former workmen's cottages and **tramroad embankment** survive, but the A5 road now passes to the west of them; the old road route is now a narrowed and gated bridleway and footpath. The **Penrhyn Iron Mine** workings, just on the east side of the new A5 route opposite the entrance to Cefny-Coed farm, were completely filled in with spoil excavated from the road works, and grassed over.

Lon Isaf **tollhouse** survives as a private residence. The old tramway route is obliterated at the junction of the old and new A5 roads, but is still just about discernable on the south side of the road, eastwards to Halfway Bridge, though much overgrown and wooded. Most of the bottom section of the **Dinas Incline** now lies within a caravan park. Some remnants of the bridge by which it passed under the road are still to be found on the north side, but all trace of the incline in the field above, up to the Penrhyn Railway route, has been eliminated by repeated ploughing.

The **tunnel mouth and river bridge** of the L&NWR Bethesda branch at Tregarth can be found in a heavily wooded area to the east of the roadway.

The continuation of the **Penrhyn tramroad** towards the quarry area lies between the main road and the later Penrhyn Railway route, fairly straight for its last mile or so. The former trackbed is used as a vehicular access for part of the distance, with an entrance off the main road leading on to the tramway route at a right-angled bend after approximately 50 metres.